

IV. Executive Order 12866 (Regulatory Planning and Review and Regulatory Flexibility Act)

Introduction

MSHA is amending 30 CFR 18.41(f), concerning plug and receptacle-type connectors for mobile battery-powered equipment. The final rule revises and updates the existing regulation by allowing the use of alternate locking devices to secure battery plugs to receptacles. Two alternate locking devices are addressed in this final rule:

(1) Captive locking devices requiring use of a special tool. These devices have been accepted since 1987 under an MSHA policy allowing their usage.

(2) Spring-loaded or other locking devices. Spring-loaded locking devices have been accepted by MSHA under the 101(c) Petition for Modification process.

The final rule eliminates the need to file petitions for modification (PFM) to use spring-loaded locking devices to secure battery plugs to receptacles. It also codifies the 1987 MSHA policy of allowing acceptance of captive locking devices.

Executive Order (E.O.) 12866 requires that regulatory agencies assess both the costs and benefits of intended regulations. MSHA has fulfilled this requirement for this final rule, and based upon its economic analysis, has determined that the final rule will not have an annual effect of \$100 million or more on the economy. Therefore, it will not be an economically significant regulatory action pursuant to section 3(f)(1) of E.O. 12866.

The final rule eliminates the need for mine operators of underground gassy mines, who choose to use plug and receptacle-type connectors for mobile battery-powered equipment, to file PFMs, and thereby will generate cost savings.

From 1999 to 2001, 66 petitions were filed and granted to modify the application of 30 CFR 75.503 (permissible electric face equipment; maintenance) and 30 CFR 18.41(f) (plug and receptacle-type connectors). From January 2002 through November 20, 2002, 23 petitions have been filed, for a total of 89 filed petitions from 1999 to 2002. On average, 22 petitions were filed during each of the past 4 years.

Mining Sectors Affected

The final rule applies to all underground gassy mines. All underground coal mines are considered gassy mines and are affected by this final rule. This final rule also applies to gassy metal and nonmetal (M/NM) mines. Currently there are no battery-powered machines of the type covered

by the final rule in any of the gassy M/NM mines. Since these devices have not been used in M/NM mines, for purposes of this economic analysis, MSHA assumes that M/NM mines will not be affected by this rule. MSHA estimates that, on average, 22 underground coal mines per year will be affected by this rule.

Benefits

MSHA has qualitatively determined that the final rule, which will permit the use of alternate locking devices on mobile battery-powered equipment instead of using padlocks, will yield safety benefits relative to the existing rule, which does not permit use of alternate locking devices on mobile battery-powered equipment. The use of alternate locking devices in lieu of padlocks on mobile battery-powered equipment will eliminate the problems associated with difficult removal of padlocks.

Compliance Costs

Cost savings from the final rule will accrue to underground coal mines that choose to use spring-loaded locking devices on mobile battery-powered equipment since they will no longer have to file a PFM.

Gross cost savings from the final rule are estimated to be \$9,747 per year.

The cost savings are based upon the elimination of the filing of an average of 22 petitions per year. The companies filing the petitions may own more than one mine. However, cost savings associated with elimination of the petition process are assumed not to depend on the number of mines at which the petitioned modification will be implemented. It is projected that of the 22 companies, 19 will employ 20 to 500 workers, and 3 will employ fewer than 20 workers. For the 3 companies that employ fewer than 20 workers these cost savings will be \$1,329. For the remaining 19 companies that employ 20 to 500 workers the cost savings will be \$8,418.

Mines Employing Fewer Than 20 Workers

The cost savings of \$1,329 for companies employing fewer than 20 workers are derived in the following manner. On average, a mine supervisor, earning \$54.92 per hour, takes 8 hours to prepare a petition (3 petitions \times 8 hours \times \$54.92 per hour = \$1,318). In addition, a clerical worker, earning \$19.58 per hour, takes 0.1 hours to copy and mail a petition (3 petitions \times 0.1 hours \times \$19.58 per hour = \$6). Furthermore, MSHA estimates that, on average, each petition is 5 pages long,

photocopying costs are \$0.15 per page, and postage is \$1 [3 petitions \times ((5 pages \times \$0.15 per page) + \$1) = \$5].

Mines Employing 20 to 500 Workers

The cost savings of \$8,418 for companies that employ 20 to 500 workers are derived in the following manner. On average, a mine supervisor, earning \$54.92 per hour, takes 8 hours to prepare a petition (19 petitions \times 8 hours \times \$54.92 per hour = \$8,348). In addition, a clerical worker, earning \$19.58 per hour, takes 0.1 hours to copy and mail a petition (19 petitions \times 0.1 hours \times \$19.58 per hour = \$37). Furthermore, MSHA estimates that, on average, each petition is 5 pages long, photocopying costs are \$0.15 per page, and postage is \$1 [19 petitions \times ((5 pages \times \$0.15 per page) + \$1) = \$33].

Net Compliance Costs

As described below, the gross cost savings every year of \$9,747 will be slightly offset by additional costs of \$808 in the first year the rule takes effect. The costs are influenced by the number of mines per petition that adopt the modification. MSHA assumes that 1.4 mines per petition adopt the modification. MSHA estimates that 18 petitioners, or 25 mines (18 petitions \times 1.4 mines/petition), that were approved to have alternate locking devices through the petition process but were not required to have warning tags would have to install these tags, costing \$8 each, during the first year. The agency assumes that there are, on average, 1.4 mines per petition, two machines per mine, and two warning tags per machine (there are typically two connectors per machine with each requiring a warning tag). The agency estimates the total cost for warning tags would be \$808 [(18 petitions \times 1.4 mines/petition \times 2 machines/mine \times 2 warning tags/machine) or 101 tags @ \$8 each]. The agency assumes that the cost for warning tags will be borne by 3 mines with fewer than 20 employees and by 22 mines with 20 to 500 employees. Thus, the cost of installing tags will be \$112 for mines with fewer than 20 employees and \$696 for mines with 20 to 500 employees.

Net benefits for the first year will be \$8,939. Assuming that the first year cost for warning tags of \$808 is annualized over the life of the alternate locking devices, the annualized costs for the warning tags will be \$57 (\$808 \times .07, where .07 is the annualization factor for an investment with a 7 percent discount rate and an infinite life). Therefore, the yearly net benefits will be \$9,690 (\$9,747 - \$57).